

Linear modules pneumatic

with rail guide



Material:

Housing high-strength aluminium.
Stop system steel.

Version:

Housing anodised.
Stop system hardened and black oxidised.

Sample order:

n1m 20034-4020

Note:

Maintenance-free pneumatic linear modules with recirculating ball bearing guide and load capacity of max. 30 N. Control by 4/2 or 5/2 directional valve. Pneumatic drive, 4-8 bar, constant, filtered (10 µm), dried, oiled or unoled. Compressed air connection M5. Modules of the same size can be combined with one another without adapter plates via the precise centring system by means of centring rings 20240. The position of the stop system is variable.

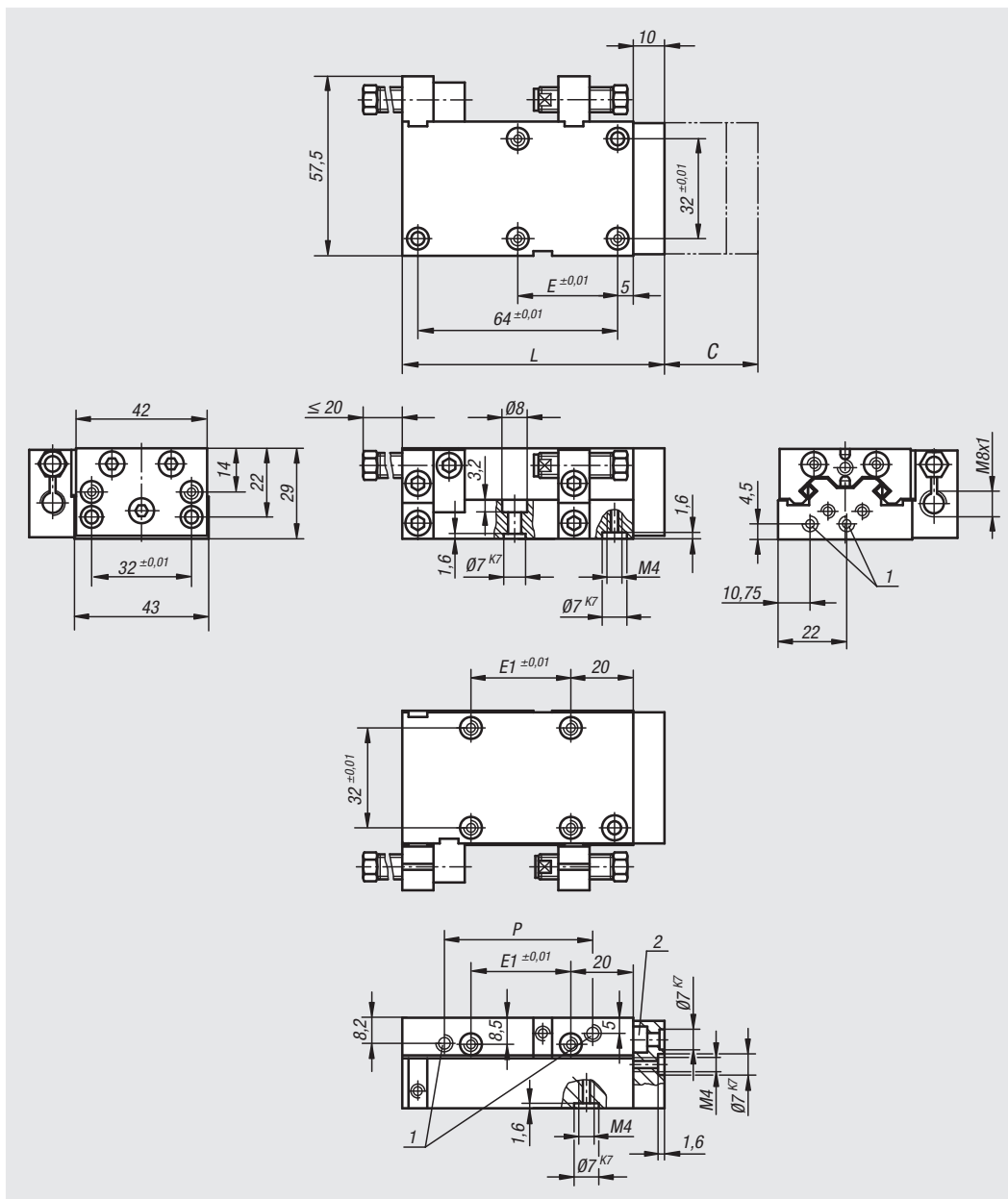
Repeat accuracy ±0.01 mm.

Accessories:

See table for shock absorbers and proximity switches.

Drawing reference:

- 1) compressed air connections
- 2) counterbore for socket head screw ISO 4762-M4



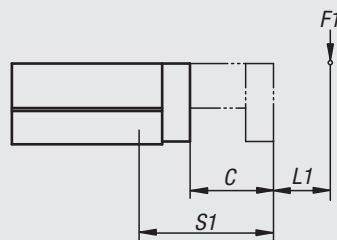
Order No.	Size	C (travel)	E	E1	L	P	Piston force at 6 bar (N)	Retraction force at 6 bars (N)	Cylinder Ø	Air consumption per cycle at 6 bar (ccm)
20034-4020	4	20	1 x 32	1 x 32	84	47,5	33	45	12	4
20034-4030	4	30	1 x 32	1 x 32	84	47,5	33	45	12	6
20034-4045	4	45	2 x 32	2 x 32	104	55	33	45	12	10,5
20034-4060	4	60	3 x 32	2 x 32	124	78,5	33	45	12	15
20034-4075	4	75	3 x 32	2 x 32	144	85	33	45	12	21,5
20034-4090	4	90	4 x 32	3 x 32	164	110,5	33	45	12	28

Order No.	Size	Suitable shock absorber	Suitable proximity switch
20034-4020	4	26300-0810008	83000-020X5000
20034-4030	4	26300-0810008	83000-020X5000
20034-4045	4	26300-0810008	83000-020X5000
20034-4060	4	26300-0810008	83000-020X5000
20034-4075	4	26300-0810008	83000-020X5000
20034-4090	4	26300-0810008	83000-020X5000

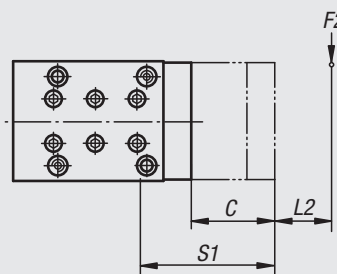
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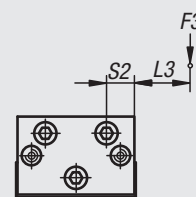
Load data



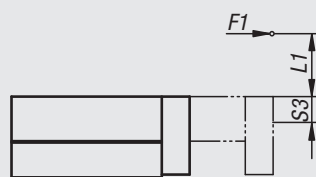
$$M1 = (S1 + L1) \times F1$$



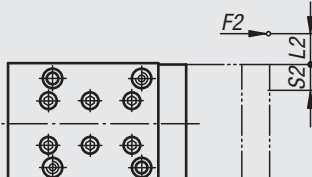
$$M2 = (S1 + L2) \times F2$$



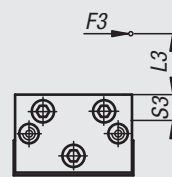
$$M3 = (S2 + L3) \times F3$$



$$M1 = (S3 + L1) \times F1$$



$$M2 = (S2 + L2) \times F2$$



$$M3 = (S3 + L3) \times F3$$

$$\frac{M1_{eff}}{M1_{zul}} + \frac{M2_{eff}}{M2_{zul}} + \frac{M3_{eff}}{M3_{zul}} \leq 1$$

Calculating the lifespan:

$$L = \left(\frac{M_{zul}}{M_{eff}} \right)^3 \times 10^5$$

L = lifespan (m)
 M_{zul} = permissible torque (Nm)
 M_{eff} = calculated torque (Nm)



Order No.	Size	M1 Nm	M2 Nm	M3 Nm	S1	S2	S3
20034-4020	4	12	12	17	29 + C/2 (travel)	9	13
20034-4030	4	12	12	17	29 + C/2 (travel)	9	13
20034-4045	4	15	15	20	36 + C/2 (travel)	9	13
20034-4060	4	18	18	23	44 + C/2 (travel)	9	13
20034-4075	4	21	21	26	51 + C/2 (travel)	9	13
20034-4090	4	25	25	29	59 + C/2 (travel)	9	13